

In the Claims

Claims 24-25 have been added. Please amend the claims as follows:

1. (Currently amended) A porous substrate comprising: a support; and an inorganic porous region on a surface of said support, ~~the~~ the inorganic porous region being of primarily inorganic material and having a surface upon which a number capable of immobilizing of probe molecules ~~can be immobilized~~, the inorganic porous region having a tint and exhibits a reduced level of auto-fluorescence of at least about 15% relative to a comparable non-tinted porous substrate surface.
2. (Currently amended) The porous substrate according to claim 1, wherein said porous region having a tint that reduces relative auto-fluorescence levels by at least about 20-25% over said non-tinted porous substrate surface.
3. (Original) The porous substrate according to claim 2, wherein said porous region having a tint that reduces relative auto-fluorescence levels by at least about 50% over said non-tinted porous substrate surface.
4. (Cancelled)
5. (Original) The porous substrate according to claim 1, wherein said reduction in auto-fluorescence is over a wavelength range from about 400 nm to about 720 nm.
6. (Cancelled)
7. (Original) The porous substrate according to claim 1, wherein said tinted porous region has a colorant component including a transition metal ion.
8. (Currently amended) The porous substrate according to claim 1, wherein porous substrate consists essentially of: ~~wherein said tinted porous region has a colorant component incorporated in a composition in weight percent consisting essentially of:~~

Oxide	wt. %
SiO ₂	53-67
Al ₂ O ₃	3-10
B ₂ O ₃	12-24
K ₂ O	0-5
MgO	0-2
CaO	0.5-3
SrO	0-3
BaO	2-7
Sb ₂ O ₃	0-2

wherein said tinted inorganic porous region has a colorant component incorporated in a composition in weight percent comprising ~~and~~ at least one of the following either individually or in combination:

Co ₃ O ₄	0.1-9
NiO	0.1-10

and

R _x O _y	0-10
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wherein R is a transition metal, and x and y are each ≥ 0 .

9. (Original) The porous substrate according to claim 8, wherein said R is selected from the group consisting of Fe, V, and Cu.

10. (Currently amended) The porous substrate according to claim 1, wherein said inorganic porous region has a composition consisting essentially of:

Oxide	wt. %
SiO ₂	55-65
Al ₂ O ₃	4-9
B ₂ O ₃	14-21
K ₂ O	1-5
MgO	0.1-2
CaO	1-2.5
SrO	0.5-1.75
BaO	3-5
Sb ₂ O ₃	0-2

wherein said tinted inorganic porous region has a colorant component incorporated in a composition in weight percent comprising at least one of the following, either individually or in combination:

Co ₃ O ₄	0.1-8
NiO	0.1-10

and

R _x O _y	0-10
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wherein R is a transition metal selected from the group consisting of Fe, V, and Cu, and x and y are each ≥ 0 .

11. (Currently amended) The porous substrate according to claim 8, wherein said glass composition is ~~ischemically and mechanically durable, and~~ has a coefficient of thermal expansion (CTE) of between about $35-44 \times 10^{-7}/^{\circ}\text{C}$.

12. (Original) The porous substrate according to claim 11, wherein said glass composition has a CTE of about $38-40 \times 10^{-7}/^{\circ}\text{C}$.

13. (Currently amended) The porous substrate according to claim 1, wherein ~~before a GAPS-coating process,~~ said tinted region has an average auto-fluorescence background for Cy3 and Cy5 channels of up to about 50% RFU of said un-tinted porous substrate.

14. (Original) The porous substrate according to claim 1, wherein a number of biological or chemical probes are attached at defined locations on or within said tinted porous layer.

15. (Original) The porous substrate according to claim 13, wherein said defined locations of probes assume a microarray format of at least one microspot per cm^2 .

16. (Original) The porous substrate according to claim 13, wherein said defined locations of probes assume a microarray format of at least 10 microspots per cm^2 .

17. (Original) The porous substrate according to claim 1, wherein said probe molecules include at least one kind of species selected from the following: oligonucleotides, nucleotides, nucleosides, DNA, RNA, peptide nucleic acid (PNA), peptides, polypeptides, protein domains, proteins, fusion proteins, antibodies, protein-membranes, G-coupled protein receptors, gangliosides, lipids, lipid membranes, cells or cell membranes, cell-lysate, or protein-small molecule ligands.

18. (Currently amended) A tool for performing biological or chemical assays, the tool comprises a non-porous support; and an inorganic porous region on a surface of said support, the inorganic porous region being of primarily inorganic material and having a surface capable of upon which a number of immobilizing probe molecules may be immobilized, the inorganic porous region having a tint and exhibits a reduced level of auto-fluorescence of at least about 15% relative to a comparable non-tinted porous substrate surface.

19. (Currently amended) The tool according to claim 18, wherein said porous region having a tint that reduces relative auto-fluorescence levels by at least about 20-25% over said non-tinted porous substrate surface.

20. (Original) The tool according to claim 18, wherein said tinted porous region has a colorant component including a transition metal ion.

21. (Currently amended) The tool according to claim 18, wherein said inorganic porous region consists essentially of: ~~wherein said tinted porous region has a colorant component incorporated in a composition in weight percent consisting essentially of:~~

Oxide	wt. %
SiO ₂	53-67
Al ₂ O ₃	3-10
B ₂ O ₃	12-24
K ₂ O	0-5
MgO	0-2
CaO	0.5-3
SrO	0-3
BaO	2-7
Sb ₂ O ₃	0-2

wherein said tinted porous region has a colorant component incorporated in a composition in weight percent comprising and at least one of the following either individually or in combination

Co_3O_4	0.1-9
NiO	0.1-10

and

R_xO_y	0-10
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wherein R is a transition metal, and x and y are each ≥ 0 .

22. (Original) The tool according to claim 21, wherein said R is selected from the group consisting of Fe, V, and Cu.

23. (Original) The tool according to claim 18, wherein said probe molecules are biological or chemical molecules, including at least one kind of the following: oligonucleotides, nucleotides, nucleosides, DNA, RNA, peptide nucleic acid (PNA), peptides, polypeptides, protein domains, proteins, fusion proteins, antibodies, gangliosides, membrane proteins, lipids, lipid membranes, cellular membranes, cell lysates, oligosaccharides, or polysaccharides, or lectins.

24. (New) The porous substrate according to claim 1, said porous region further comprising pores having pore sizes greater than 0.5 μm .

25. (New) The tool according to claim 18, wherein said porous region has pore sizes greater than 0.5 μm .